

CLAIMS

- 5 1. Use of a mutant form of EtxB or CtxB to deliver an agent to a target cell wherein the mutant has GM-1 binding activity; but wherein the mutant has a reduced immunogenic and immunomodulatory activity relative to the wild type form of EtxB or CtxB.
- 10 2. Use according to claim 1 wherein the agent is selected from the group consisting of a peptide or protein of interest (POI); an antigen; an antigenic determinant; an antibody; and a nucleotide sequence of interest (NOI).
- 15 3. Use according to claim 2 wherein the agent may be linked to a membrane translocating or fusigenic peptide.
- 20 4. Use according to claim 3 wherein the membrane translocating or fusigenic peptide may comprise elements of the Pol-loop segment corresponding to a domain in the C-terminal region of HSV-1 polymerase.
- 25 5. Use according to claim 2, 3 or 4 wherein the antigen is selected from the group consisting of a viral antigen, a bacterial antigen, a parasitic antigen; and a tumour associated antigen (TAA).
- 30 6. Use according to any one of claims 1-5 wherein the agent is delivered into a vesicular compartment of the target cell.
7. Use according to any one of claims 1-6 wherein the agent is targeted to the cytosol and/or the nucleus and/or an organelle of the target cell.
8. Use according to any one of the preceding claims wherein the target cell is an antigen presenting cell (APC).

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9. Use according to any one of the preceding claims wherein the mutant comprises a mutation in the region spanning amino acid residues E51-I58 of the β 4- α 2 loop of CtxB or EtxB.
- 5 10. Use according to claim 9 wherein the mutant comprises a mutation at amino acid residues 51, 56 and/or 57 of the β 4- α 2 loop.
11. Use according to claim 9 or claim 10 wherein the mutant comprises a H57A or H57S mutation.
- 10 12. Use of a mutant according to any one of the preceding claims in the preparation of a medicament to deliver an exogenous peptide into the MHC Class I antigen processing and presentation pathways to elicit a CTL response.
- 15 13. Use according to claim 12 wherein the exogenous peptide is any one of the agents as defined in claim 5.
14. The use of a mutant as defined in any one of claims 1-13 in the preparation of a medicament for separate, simultaneous or combined use to treat a disease or
20 a condition in a subject in need of same.
15. A method of treating a disease or condition in a subject in need of same wherein the method comprises:
 - (i) providing a target cell; and
 - 25 (ii) delivering an agent to the target cell using a mutant as defined in any one of claims 1-13.
16. A method according to claim 15 or the use according to any one of claims 12-14 wherein the disease or condition is a viral infection or a cancer.
- 30 17. A method of delivering an agent using a mutant to a target cell wherein the method comprises:
 - (i) providing a target cell;

- (ii) contacting the cell with the mutant as defined in any one of claims 1-13; and
- (iii) monitoring for the presence of the agent in the target cell.

5 18. A method according to claim 17 wherein the agent is delivered to a vesicular compartment, and/or cytosol and/or nucleus and/or an organelle of the target cell.

10 19. A composition, preferably a pharmaceutical composition, comprising a mutant as defined in any one of claims 1-13 and a pharmaceutically acceptable carrier(s), diluent(s), excipient(s) or adjuvant or any combination thereof.

20. A composition comprising a mutant as defined in any one of claims 1-13 which is a vaccine.

15 21. A kit for delivering an agent to a target cell wherein the kit comprises:

- (i) a mutant as defined in any one of claims 1-13;
- (ii) an agent for delivery to the target cell; and optionally
- (iii) means for detecting the location of the agent in the target cell.

20 22. The use and the method substantially as defined herein and with reference to the accompanying Figures.

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